

REPORT DOCUMENTATION

ovd
4-0188

AD-A230 027

existing data sources,
or any other aspect of
reports, 1215 Jefferson
St., DC 20503.

Public reporting burden for this collection of information is estimated to average 1 hour
gathering and maintaining the data needed, and completing and reviewing the collection
of this collection of information, including suggestions for reducing this burden, to Washington
Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management

1. Agency Use Only (Leave blank).	2. Report Date.	3. Report Type and Dates Covered. Abstract																					
4. Title and Subtitle.		5. Funding Numbers. Program Element No. 0602435N Project No. Task No. Accession No. DN258022																					
6. Author(s).		8. Performing Organization Report Number. AB 90:221:108																					
7. Performing Organization Name(s) and Address(es).		9. Sponsoring/Monitoring Agency Name(s) and Address(es). Exploratory Development Program Group Naval Oceanographic and Atmospheric Research Laboratory Code 113, Stennis Space Center, MS 39529-5004																					
11. Supplementary Notes. ASA		10. Sponsoring/Monitoring Agency Report Number. AB 90:221:108																					
12a. Distribution/Availability Statement. Approved for public release; distribution is unlimited.		12b. Distribution Code.																					
13. Abstract (Maximum 200 words). A technique used to couple 2-D propagation as calculated by PE with the 3-D scattering from a rough surface as calculated by the wedge assemblage method has been previously presented, [J. Acoust. Soc. Am. Suppl. 1 86, S66 (1989)]. In this paper, the forward and backscattered fields resulting from interaction with a rough sea surface are predicted by this hybrid model and compared with predictions made by a hybrid PE-finite-element model (PE-FFRAME).		 <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">Accession For</td> <td style="width: 15%;">NEIS CR&I</td> <td style="width: 15%;">DTIC 143</td> <td style="width: 15%;">Unenclosed</td> <td style="width: 15%;">Justification</td> <td style="width: 15%;">By</td> <td style="width: 15%;">Availability Codes</td> <td style="width: 15%;">Avail and/or</td> <td style="width: 15%;">Special</td> </tr> <tr> <td colspan="3" style="text-align: center;">100 COPIES</td> <td colspan="3" style="text-align: center;">A-120</td> <td colspan="3" style="text-align: center;">100 COPIES</td> </tr> </table>				Accession For	NEIS CR&I	DTIC 143	Unenclosed	Justification	By	Availability Codes	Avail and/or	Special	100 COPIES			A-120			100 COPIES		
Accession For	NEIS CR&I	DTIC 143	Unenclosed	Justification	By	Availability Codes	Avail and/or	Special															
100 COPIES			A-120			100 COPIES																	
14. Subject Terms. (U) Underwater Acoustics; (U) Anti-submarine Warfare; (U) Environmental Technology		15. Number of Pages. 1																					
16. Price Code.																							
17. Security Classification of Report. Unclassified	18. Security Classification of This Page. Unclassified	19. Security Classification of Abstract. Unclassified		20. Limitation of Abstract. SAR																			